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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,859	01/14/2004	William Ng	CPU-11802/02	3416
25006	7590	12/29/2004	EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE ANDERSON & CITKOWSKI, PC 280 N OLD WOODARD AVE SUITE 400 BIRMINGHAM, MI 48009			GALL, LLOYD A	
		ART UNIT		PAPER NUMBER
		3676		
DATE MAILED: 12/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	Applicant(s)	
10/756,859	NG, WILLIAM	
Examiner	Art Unit	
Lloyd A. Gall	3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 30 September 2004.  
2a) This action is **FINAL**.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-16 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 14 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_\_ .  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

## DETAILED ACTION

In response to applicant's amendment of September 30, 2004, the prior art rejections in the first Office action are withdrawn, and replaced by the following new prior art rejections. It is regretted that this new prior art was not earlier relied upon.

Claims 9 and 11 are objected to because of the following informalities: In claim 9, line 14, "internal" should be replaced with --annular--. In claim 11, line 2, there is no antecedent basis for "said first and second stationary locations". Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu in view of the German reference (714).

Hsu teaches a disc shaped padlock body including a shackle with a gap and a notch 31 generally diametrically opposite the gap, and an external notch closed by the shackle as seen in fig. 2, which shackle slides along an internal groove in the padlock body. As seen in fig. 1, the German reference teaches that it is well known to provide bearings 4 in the surface of an arcuate shackle, which inherently limit transverse movement and rattling of the shackle and resist friction between the shackle and the body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide bearings in the surface of the shackle of Hsu, in view of the teaching of the

German reference, the motivation being to guide the shackle, and resist friction between the shackle and the body.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu in view of Arnold and Horgan.

Hsu teaches a disc shaped padlock body including a shackle with a gap and a notch 31 generally diametrically opposite the gap, and an external notch closed by the shackle as seen in fig. 2, which shackle slides along an internal groove in the padlock body. Arnold teaches guide wheels between the arcuate shackle 22 and the lock body 32 positioned at stationary locations, in pairs, and having one set adjacent the gap in the shackle.

The guide wheels remain within the body during movement between locked and unlocked positions of the shackle. Horgan teaches that it is well known to provide pinned ball bearings in pairs (column 4, line 47) on the surface of the bolt. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide ball bearings in the surface of the shackle of Hsu, in view of the respective teachings of Arnold and Horgan, the motivation being to guide the shackle in the housing, resist rattling, and serve an anti-friction purpose for the shackle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 703-308-0828. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LG LG  
December 23, 2004

*Lloyd A. Hall*

Lloyd A. Hall  
Primary Examiner